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APPLICATION NO. 09/159,773	FILING DATE 05/24/98	FIRST NAMED INVENTOR KATB	ATTORNEY DOCKET NO. 05-02254
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005514 . MM71/0128  
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EXAMINER BROWN, K
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ART UNIT 2051	PAPER NUMBER
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DATE MAILED: 01/28/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

09/159,775

Applicant(s)

hideo kato

Examiner

Khaled Brown

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- 1) ☒ Responsive to communication(s) filed on 24 September 1998.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 4,10,14,20,21,32 and 33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5-9,11-13,15-19,22-25,27-31 and 34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some \* c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☒ received.
2. ☐ received in Application No. (Series Code / Serial Number) \_\_\_\_\_.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

## Attachment(s)

- 14) ☒ Notice of References Cited (PTO-892)
- 15) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 16) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 17) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 18) ☐ Notice of Informal Patent Application (PTO-152)
- 19) ☐ Other: \_\_\_\_\_

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## **DETAILED ACTION**

### ***Claim Objections***

Claims 4,10,14,20,21,26,32 and 33 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claims have not been further treated on the merits.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5,6,16,27,28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The elements noted in the claims are not equivalents of one another. For example, the diaphragm and the lens barrel of claim 5 and the lens, mirror or prism of claim 6 are not equivalents. Therefore, rendering the claims indefinite.

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As best the examiner is able to ascertain the meaning of the claims the following rejections are made.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

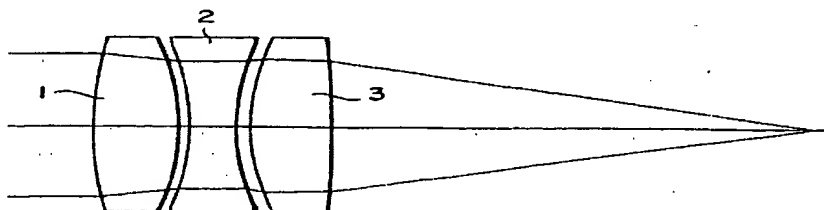
(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,2, 5-9, 11-13, 15-19,22,23,24,27-31,34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamada et al in view of Taniguchi.

Re Clms 1,2,5-9,11,12,15-19,22,23,24,27-31,34:Yamada et al discloses a lens on which a titanium oxide film is provided (Yamada et al Fig 1) for use in reduction projection aligner systems such as excimer laser reduction projection projection aligners.

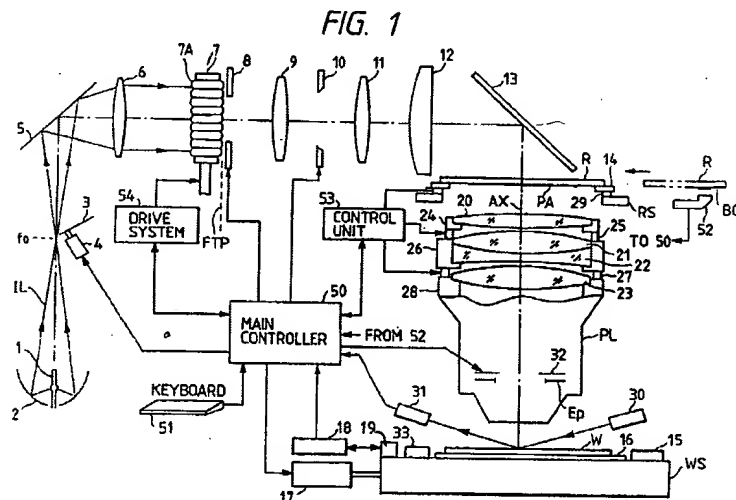
However, Yamanda et al does not disclose the claimed structure of the aligner system. Taniguchi discloses an illuminator for illuminating an object with a luminous flux emitted from a light source, the illuminator comprising: an illumination system through which the luminous flux is projected onto the object (Taniguchi Fig 1). Therefore, it would have been obvious to a person of ordinary skill in the projection art at the time the invention was made to place the titanium coated lens of Yamada et al in the aligner system of

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Taniguchi because it improves performance of the aligner system as suggested by Yamada et al (Yamada et al Col 1).

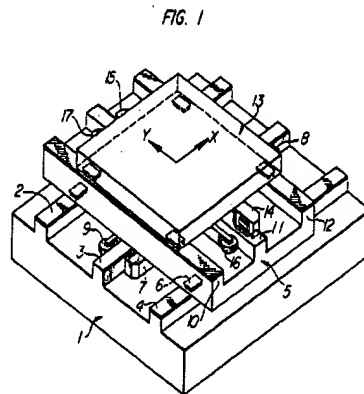


Claims 3,13,25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moriyama et al in view of Taniguchi.

Re Clms 3,13,25: Taniguchi discloses a projection aligner system (Taniguchi Fig 1). However, Taniguchi does not disclose a supporting unit in a projection aligner system being coated with titanium.

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Moriyama et al discloses a supporting unit coated with titanium for use in a projection aligner system. Therefore, it would have been obvious to a person of ordinary skill in the projection art at the time the invention was made to substitute the supporting unit coated with titanium of Moriyama et al in the projection aligner of Taniguchi because it improves performance of the aligner.



## Conclusion


The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Imai et al 5885735, Kyogoku et al 5140464, Ceglio et al 5691541, Hashimoto 5786114, Zhao et al 5966613, Urino 4991937, Hohenegger et al 5751474.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khaled Brown whose telephone number is 703-306-5738.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on 703-308-1436.

KB  
December 20, 1999

  
Safet Metjahic  
Supervisory Patent Examiner  
Technology Center 2800